

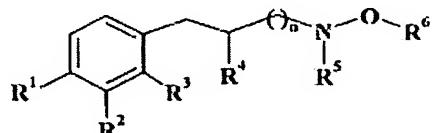
AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1-7 (cancelled)

8. (new) A method for the prevention and treatment of central and peripheral nervous system disorders involving protein misfolding or misaggregation of beta-amyloid peptides, alpha synuclein, prion protein and/or huntingtin, comprising administering to a patient in need thereof an effective amount of a compound of general formula (I):



(I)

wherein:

n is 0, 1 or 2;

R¹ and R², independently of each other, are H, OH or OCH₃;

R³ is H or CH₃;

R⁴ is H, C₁-C₃ straight or branched alkyl or, together with R³, forms a five to seven-membered carbocyclic ring;

and R⁵ and R⁶, independently of each other, are H or C₁-C₅ straight or branched alkyl.

9. (new) The method according to claim 8 wherein the central and peripheral nervous system diseases are Alzheimer's Disease, Lewy body disease, Parkinson's Disease, spongiform

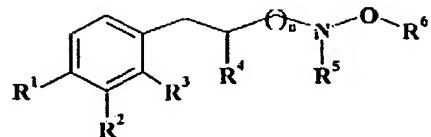
encephalopathies, Huntington's Disease and systemic AA amyloidosis including the primary amyloidosis of the peripheral nervous system and for diagnosis of said disorders.

10. (new) The method according to claim 8, wherein the compound is selected from the group consisting of:

- N-(1-methyl-2-(3-hydroxy-phenyl)-ethyl)-O-ethyl-hydroxylamine;
- N-(1-methyl-2-(3-hydroxy-phenyl)-ethyl)-N-propyl-O-ethyl-hydroxylamine;
- N-(1-methyl-2-(3,4-dihydroxy-phenyl)-ethyl)-hydroxylamine;
- N-(1-methyl-2-(3,4-dihydroxy-phenyl)-ethyl)-O-ethyl-hydroxylamine;
- N-(1-methyl-2-(3,4-dihydroxy-phenyl)-ethyl)-O-methyl-hydroxylamine;
- N-(1-methyl-2-(3,4-dihydroxy-phenyl)-ethyl)-N-propyl-O-ethyl-hydroxylamine;
- N-(1-methyl-2-(3-methoxy-phenyl)-ethyl)-O-ethyl-hydroxylamine;
- N-(1-methyl-2-(3-methoxy-phenyl)-ethyl)-N-propyl-O-ethyl-hydroxylamine;
- N-(1-methyl-2-(3,4-dimethoxy-phenyl)-ethyl)-O-ethyl-hydroxylamine;
- N-(1-methyl-2-(3,4-dimethoxy-phenyl)-ethyl)-N-propyl-O-ethyl-hydroxylamine; and

the pharmaceutically acceptable salts thereof.

11. (new) A compound of general formula (I)



and pharmaceutically acceptable salts or prodrugs thereof,
wherein:

n is 0, 1 or 2;

R¹ and R², independently of each other, are H, OH or OCH₃;

R³ is H or CH₃;

R⁴ is H, C₁-C₃ straight or branched alkyl or, together with R³, forms a five to seven-membered carbocyclic ring; and R⁵ and R⁶, independently of each other, are H or C₁-C₅ straight or branched alkyl

with the provisos that:

R¹ and R² cannot be both hydrogen;

when n is 0, R¹ and R² are both hydroxyl, R³ and R⁵ are hydrogen, R⁴ cannot be CH₃;

when n is 0, R³ is H and R⁴ is H or CH₃, R⁶ cannot be C₁-C₃ straight or branched alkyl;

and that the compounds cannot be:

- 1-(4-hydroxyphenyl)-2-hydroxylaminoethane,
- 1-(4-hydroxyphenyl)-2-hydroxylaminopropane,
- 1-(4-methoxyphenyl)-2-hydroxylaminopropane,
- 1-(3,4-dimethoxyphenyl)-2-hydroxylaminopropane,
- 1-(4-methoxyphenyl)-4-hydroxylaminobutane
- 1-(3-methoxyphenyl)-2-hydroxylaminopropane,
- 1-(3,4-dimethoxyphenyl)-2-hydroxylaminoethane,

- N-methyl-1-(3,4-dihydroxyphenyl)-2-hydroxylaminopropane,
- 1-(3-methoxy-4-hydroxyphenyl)-2-hydroxylaminopropane,
- N-methyl-1-(3-methoxy-4-hydroxyphenyl)-2-hydroxylaminopropane,
- N-methyl-1-(3,4-dimethoxyphenyl)-2-hydroxylaminopropane.

12. (new) A compound according to claim 11 selected from the group consisting of:

- N-(5-hydroxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-O-methyl-hydroxylamine;
- N-(5-hydroxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-hydroxylamine;
- N-(5-hydroxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-N-propyl-O-ethyl-hydroxylamine;
- N-(5-methoxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-O-methyl-hydroxylamine;
- N-(5-methoxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-O-ethyl-hydroxylamine;
- N-(5-methoxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-N-propyl-O-ethyl-hydroxylamine;
- N-(5,6-dihydroxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-O-methyl-hydroxylamine;
- N-(5,6-dihydroxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-O-ethyl-hydroxylamine;
- N-(5,6-dihydroxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-N-propyl-O-ethyl-hydroxylamine;
- N-(5,6-dihydroxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-N-butyl-O-ethyl-hydroxylamine;

- N-(5,6-dihydroxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-N-butyl-O-propyl-hydroxylamine;
- N-(5,6-dimethoxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-O-methyl-hydroxylamine;
- N-(5,6-dimethoxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-O-ethyl-hydroxylamine;
- N-(5,6-dimethoxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-N-propyl-O-ethyl-hydroxylamine;
- N-(1-methyl-2-(3-hydroxy-phenyl)-ethyl)-hydroxylamine;
- N-(1-methyl-2-(3-hydroxy-phenyl)-ethyl)-N-methyl-hydroxylamine;
- N-(1-methyl-2-(3-hydroxy-phenyl)-ethyl)-N-propyl-hydroxylamine;
- N-(1-methyl-2-(3,4-dihydroxy-phenyl)-ethyl)-N-propyl-hydroxylamine;
- N-(1-methyl-2-(3-methoxy-phenyl)-ethyl)-N-methyl-hydroxylamine;
- N-(1-methyl-2-(3-methoxy-phenyl)-ethyl)-N-propyl-hydroxylamine;
- N-(1-methyl-2-(3,4-dimethoxy-phenyl)-ethyl)-hydroxylamine;
- N-(1-methyl-2-(3,4-dimethoxy-phenyl)-ethyl)-N-propyl-hydroxylamine;
- N-(5-hydroxy-1,2,3,4-tetrahydro-2-naphthalenyl-methyl)-O-ethyl-hydroxylamine;
- N-(5-methoxy-1,2,3,4-tetrahydro-2-naphthalenyl-methyl)-O-ethyl-hydroxylamine;
- N-(5,6-dihydroxy-1,2,3,4-tetrahydro-2-naphthalenyl-methyl)-O-ethyl-hydroxylamine;
- N-(5,6-dimethoxy-1,2,3,4-tetrahydro-2-naphthalenyl-methyl)-O-ethyl-hydroxylamine;

- N-(5-hydroxy-1,2,3,4-tetrahydro-2-naphthalenyl-methyl)-N-propyl-O-ethyl-hydroxylamine;
- N-(5-methoxy-1,2,3,4-tetrahydro-2-naphthalenyl-methyl)-N-propyl-O-ethyl-hydroxylamine;
- N-(5,6-dihydroxy-1,2,3,4-tetrahydro-2-naphthalenyl-methyl)-N-propyl-O-ethyl-hydroxylamine;
- N-(5,6-dimethoxy-1,2,3,4-tetrahydro-2-naphthalenyl-methyl)-N-propyl-O-ethyl-hydroxylamine;
- N-(2-methyl-3-(3,4-dihydroxy-phenyl)-propyl)-hydroxylamine;
- N-(2-methyl-3-(3,4-dihydroxy-phenyl)-propyl)-O-ethyl-hydroxylamine;
- N-(2-methyl-3-(3,4-dihydroxy-phenyl)-propyl)-N-methyl-hydroxylamine;
- N-(2-methyl-3-(3,4-dihydroxy-phenyl)-propyl)-N-propyl-hydroxylamine;
- N-(2-methyl-3-(3,4-dihydroxy-phenyl)-propyl)-N-propyl-O-ethyl-hydroxylamine;
- N-(2-methyl-3-(3,4-dimethoxy-phenyl)-propyl)-hydroxylamine;
- N-(2-methyl-3-(3,4-dimethoxy-phenyl)-propyl)-O-ethyl-hydroxylamine;
- N-(2-methyl-3-(3,4-dimethoxy-phenyl)-propyl)-N-methyl-hydroxylamine;
- N-(2-methyl-3-(3,4-dimethoxy-phenyl)-propyl)-N-propyl-hydroxylamine;
- N-(2-methyl-3-(3,4-dimethoxy-phenyl)-propyl)-N-propyl-O-ethyl-hydroxylamine;

and the pharmaceutically acceptable salts thereof.

13. (new) Pharmaceutical compositions containing one or more compounds of formula (I) according to claim 11 in a mixture with suitable excipients and/or carriers.

14. (new) Pharmaceutical compositions containing one or more compounds of formula (I) according to claim 11 and a compound for the treatment of central and peripheral nervous system disorders involving protein misfolding and/or misaggregation of beta-amyloid peptide, alpha-synuclein, prion protein and huntingtin selected from Alzheimer's Disease, Lewy body disease, Parkinson's Disease, spongiform encephalopathies, Huntington's Disease and systemic AA amyloidosis, in admixture with suitable excipients and/or carriers.